

## Patent Assignment Abstract of Title

**Total Assignments: 1**
**Application #:** 10603593 **Filing Dt:** 06/25/2003

**Patent #:** NONE

**Issue Dt:**
**PCT #:** NONE

**Publication #:** NONE

**Pub Dt:**
**Inventor:** Yogesh Swami

**Title:** System and method for optimizing link throughput in response to non-congestion-related packet loss

**Assignment: 1**

<b>Reel/Frame:</b> <u>014526/0654</u>	<b>Received:</b> 09/30/2003	<b>Recorded:</b> 09/26/2003	<b>Mailed:</b> 04/23/2004
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**Pages:**  
3

**Conveyance:** ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

**Assignor:** SWAMI, YOGESH
**Exec Dt:** 07/30/2003

**Assignee:** NOKIA CORPORATION

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 FIN-02150 ESPOO, FINLAND

**Correspondent:** CRAWFORD MAUNU PLLC

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 1270 NORTHLAND DRIVE, SUITE 390  
 ST. PAUL, MN 55120

Search Results as of: 10/29/2004 10:02:38 A.M.

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## Results Key:

**JNL** = Journal or Magazine **CNF** = Conference **STD** = Standard

**1 A comparison of mechanisms for improving TCP performance over wireless links**

*Balakrishnan, H.; Padmanabhan, V.N.; Seshan, S.; Katz, R.H.;*  
Networking, IEEE/ACM Transactions on , Volume: 5 , Issue: 6 , Dec. 1997  
Pages:756 - 769

[\[Abstract\]](#) [\[PDF Full-Text \(368 KB\)\]](#) IEEE JNL

**2 Delay performance of the new explicit loss notification TCP technique in wireless networks**

*Wenqing Ding; Jamalipour, A.;*  
Global Telecommunications Conference, 2001. GLOBECOM '01. IEEE , Volume: 6 , 25-29 Nov. 2001  
Pages:3483 - 3487 vol.6

[\[Abstract\]](#) [\[PDF Full-Text \(246 KB\)\]](#) IEEE CNF

**3 PET: enhancing TCP performance over 3G & beyond networks**

*Li, V.H.; Zhi-Qiang Liu;*  
Vehicular Technology Conference, 2003. VTC 2003-Fall. 2003 IEEE 58th , Volu 4 , 6-9 Oct. 2003  
Pages:2302 - 2306 Vol.4

[\[Abstract\]](#) [\[PDF Full-Text \(957 KB\)\]](#) IEEE CNF

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## Refine Search

### Search Results -

Term	Documents
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THROUGHPUTS	3943
(41 AND THROUGHPUT).USPT.	4
(L41 AND THROUGHPUT ).USPT.	4

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L42

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### Search History

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Set Name Query  
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DB=USPT; PLUR=YES; OP=ADJ

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<u>L42</u>	L41 and throughput	4	<u>L42</u>
<u>L41</u>	L40 and bit and error	5	<u>L41</u>
<u>L40</u>	L39 and congestion	7	<u>L40</u>
<u>L39</u>	packet adj loss and recovery adj procedure	30	<u>L39</u>
<u>L38</u>	non-congestion and packet adj loss	8	<u>L38</u>
<u>L37</u>	first adj recovery and second adj recovery and packet adj loss	0	<u>L37</u>
<u>L36</u>	L35 and recovery	3	<u>L36</u>
<u>L35</u>	L34 and congestion	6	<u>L35</u>
<u>L34</u>	packet adj loss adj bit	13	<u>L34</u>
<u>L33</u>	L32	3	<u>L33</u>
<u>L32</u>	L30 and bit adj error	3	<u>L32</u>

<u>L31</u>	L30 and error adj bit	0	<u>L31</u>
<u>L30</u>	L27 and recovery	5	<u>L30</u>
<u>L29</u>	L27 and loss adj recovery	0	<u>L29</u>
<u>L28</u>	noncongestion and packet adj loss	1	<u>L28</u>
<u>L27</u>	non-congestion and packet adj loss	8	<u>L27</u>
<u>L26</u>	L25 and increase adj throughput	1	<u>L26</u>
<u>L25</u>	L24 and throughput	18	<u>L25</u>
<u>L24</u>	L23 and congestion	30	<u>L24</u>
<u>L23</u>	loss adj recovery and packet adj loss	68	<u>L23</u>
<u>L22</u>	first adj loss adj recovery and second adj loss adj recovery	0	<u>L22</u>
<u>L21</u>	L9 and packet adj loss adj bit	10	<u>L21</u>
<u>L20</u>	L16 and recovery	2	<u>L20</u>
<u>L19</u>	L16 and identification	1	<u>L19</u>
<u>L18</u>	L16 and non-congested	0	<u>L18</u>
<u>L17</u>	L16 and non-congestion	0	<u>L17</u>
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<u>L11</u>	L10 and recovery	68	<u>L11</u>
<u>L10</u>	L9 and congestion	111	<u>L10</u>
<u>L9</u>	packet adj loss and bit adj errors	282	<u>L9</u>
<u>L8</u>	PLB and packet adj loss	0	<u>L8</u>
<u>L7</u>	L6 and PLB	0	<u>L7</u>
<u>L6</u>	l2 and packet adj loss	44	<u>L6</u>
<u>L5</u>	L2 and non-congested	1	<u>L5</u>
<u>L4</u>	L2 and noncongestion	0	<u>L4</u>
<u>L3</u>	L2 and non-congestion	0	<u>L3</u>
<u>L2</u>	increase adj throughput	6199	<u>L2</u>
<u>L1</u>	optimizing adj link adj throughput	0	<u>L1</u>

END OF SEARCH HISTORY

## Refine Search

### Search Results -

Term	Documents
BIT	283910
BITS	194973
ERROR	332363
ERRORS	185143
(30 AND (BIT ADJ ERROR)).USPT.	3
(L30 AND BIT ADJ ERROR ).USPT.	3

**Database:**  US Pre-Grant Publication Full-Text Database  US Patents Full-Text Database  US OCR Full-Text Database  EPO Abstracts Database  JPO Abstracts Database  Derwent World Patents Index  IBM Technical Disclosure Bulletins

**Search:**

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<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
			result set
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<u>L22</u>	first adj loss adj recovery and second adj loss adj recovery	0	<u>L22</u>
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<u>L14</u>	L13 and increase adj throughput	11	<u>L14</u>
<u>L13</u>	370/229.ccls.	445	<u>L13</u>
<u>L12</u>	L11 and increase adj throughput	1	<u>L12</u>
<u>L11</u>	L10 and recovery	68	<u>L11</u>
<u>L10</u>	L9 and congestion	111	<u>L10</u>
<u>L9</u>	packet adj loss and bit adj errors	282	<u>L9</u>
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<u>L7</u>	L6 and PLB	0	<u>L7</u>
<u>L6</u>	l2 and packet adj loss	44	<u>L6</u>
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<u>L4</u>	L2 and noncongestion	0	<u>L4</u>
<u>L3</u>	L2 and non-congestion	0	<u>L3</u>
<u>L2</u>	increase adj throughput	6199	<u>L2</u>
<u>L1</u>	optimizing adj link adj throughput	0	<u>L1</u>

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### Search Results -

Term	Documents
NULL	40672
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(47 AND NULL).USPT.	1
(L47 AND NULL ).USPT.	1

Database: **US Pre-Grant Publication Full-Text Database**  
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result set

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<u>L48</u>	L47 and null	1	<u>L48</u>
<u>L47</u>	L12 and zero	1	<u>L47</u>
<u>L46</u>	l12 and empty	0	<u>L46</u>
<u>L45</u>	L44	0	<u>L45</u>
<u>L44</u>	L43	0	<u>L44</u>
<u>L43</u>	empty adj packet adj loss	0	<u>L43</u>
<u>L42</u>	L41 and throughput	4	<u>L42</u>
<u>L41</u>	L40 and bit and error	5	<u>L41</u>
<u>L40</u>	L39 and congestion	7	<u>L40</u>
<u>L39</u>	packet adj loss and recovery adj procedure	30	<u>L39</u>
<u>L38</u>	non-congestion and packet adj loss	8	<u>L38</u>

<u>L37</u>	first adj recovery and second adj recovery and packet adj loss	0	<u>L37</u>
<u>L36</u>	L35 and recovery	3	<u>L36</u>
<u>L35</u>	L34 and congestion	6	<u>L35</u>
<u>L34</u>	packet adj loss adj bit	13	<u>L34</u>
<u>L33</u>	L32	3	<u>L33</u>
<u>L32</u>	L30 and bit adj error	3	<u>L32</u>
<u>L31</u>	L30 and error adj bit	0	<u>L31</u>
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<u>L24</u>	L23 and congestion	30	<u>L24</u>
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<u>L17</u>	L16 and non-congestion	0	<u>L17</u>
<u>L16</u>	L15 and congestion	2	<u>L16</u>
<u>L15</u>	L14 and packet adj loss	2	<u>L15</u>
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<u>L13</u>	370/229.ccls.	445	<u>L13</u>
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<u>L10</u>	L9 and congestion	111	<u>L10</u>
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<u>L2</u>	increase adj throughput	6199	<u>L2</u>
<u>L1</u>	optimizing adj link adj throughput	0	<u>L1</u>

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1. Document ID: US 6370114 B1

L20: Entry 1 of 2

File: USPT

Apr 9, 2002

US-PAT-NO: 6370114

DOCUMENT-IDENTIFIER: US 6370114 B1

**\*\* See image for Certificate of Correction \*\***

TITLE: Apparatus and method for optimizing congestion control information in a multi-protocol network

DATE-ISSUED: April 9, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gullicksen; Jeffrey T.	Santa Clara	CA		
Bernstein; Greg M.	Fremont	CA		
Chhabra; Gurpreet S.	Sunnyvale	CA		

US-CL-CURRENT: 370/229; 370/230, 370/395.52

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	KWIC	Drawn D
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2. Document ID: US 5912878 A

L20: Entry 2 of 2

File: USPT

Jun 15, 1999

US-PAT-NO: 5912878

DOCUMENT-IDENTIFIER: US 5912878 A

TITLE: Method and end station with improved user reponse time in a mobile network

DATE-ISSUED: June 15, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Park; Sung-Woo	Vancouver			CA
Andjelic; Dragan	Vancouver			CA
Maini; Viji	Delta			CA

US-CL-CURRENT: 370/229; 370/232, 455/427

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Search](#) | [Advanced Search](#) | [Claims](#) | [KMIC](#) | [Drawn](#)[Clear](#)[Generate Collection](#)[Print](#)[Fwd Refs](#)[Bkwd Refs](#)[Generate OACS](#)

Term	Documents
RECOVERY	202116
RECOVERIES	4866
RECOVERYS	4
(16 AND RECOVERY).USPT.	2
(L16 AND RECOVERY ).USPT.	2

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1. Document ID: US 6732314 B1

L12: Entry 1 of 1

File: USPT

May 4, 2004

US-PAT-NO: 6732314

DOCUMENT-IDENTIFIER: US 6732314 B1

TITLE: Method and apparatus for L2TP forward error correction

DATE-ISSUED: May 4, 2004

**INVENTOR-INFORMATION:**

NAME	CITY	STATE	ZIP CODE	COUNTRY
Borella; Michael S.	Naperville	IL		
Schuster; Guido	Des Plaines	IL		
Sidhu; Ikhlaq S.	Vernon Hills	IL		
Mahler; Jerry	Prospect Heights	IL		

US-CL-CURRENT: [714/752](#); [714/776](#)

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Term	Documents
INCREASE	1223220
INCREASES	840393
THROUGHPUT	81980
THROUGHPUTS	3943
(11 AND (INCREASE ADJ THROUGHPUT)).USPT.	1
(L11 AND INCREASE ADJ THROUGHPUT ).USPT.	1

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